2.2.3.6 Forest Transition Ecological Landscape

Figure 2-18. Forest Transition Ecological Landscape.

General Description

The Forest Transition Ecological Landscape lies along the northern border of Wisconsin's Tension Zone, through the central and western part of the state (Figure 2-18), and supports both northern forests and agricultural areas. The central portion of the Forest Transition lies primarily on a glacial till plain deposited by glaciation between 25,000 and 790,000 years ago. The eastern and western portions are on moraines of the Wisconsin glaciation. The growing season in this part of the state is long enough that agriculture is viable, although climatic conditions are not as favorable as in southern Wisconsin. Soils are diverse, ranging from sandy loam to loam or shallow silt loam, and from poorly drained to well drained.

Vegetation

The historic vegetation of the Forest Transition was primarily northern hardwood forest. These northern hardwoods were dominated by sugar maple and hemlock, and contained some yellow birch, red pine, and white pine.

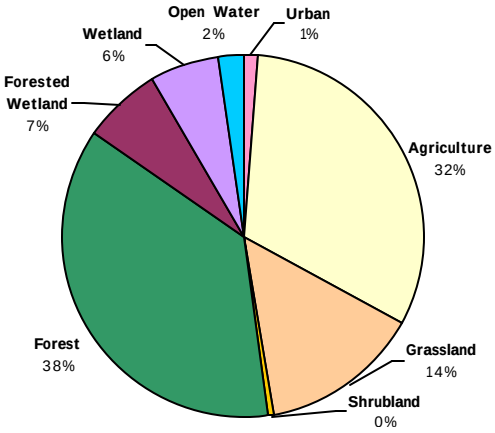

Figure 2-19. Current land cover in the Forest Transition Ecological Landscape.

Currently, over 60% of this Ecological Landscape is non-forested (Figure 2-19). Forested areas consist primarily of northern hardwoods and aspen, with smaller amounts of oak and lowland hardwoods. The eastern portion of the Ecological Landscape differs from the rest of the area in that it remains primarily forested, and includes some ecologically significant areas. Throughout the Ecological Landscape, small areas of conifer swamp are found near the headwaters of streams, and associated with lakes in kettle depressions on moraines. Ground flora show characteristics of both northern and southern Wisconsin, as this Ecological Landscape lies along the Tension Zone.

Hydrologic Features

Small kettle lakes are common on the moraines in the western and eastern parts of the Ecological Landscape, but there are few lakes in the central glacial till plain. Several streams have their headwaters in the moraines. Many small creeks and rivers flow across the plain, in a dendritic pattern; these include the Big Rib, Little Rib, Trappe, St. Croix, and Wisconsin. This Ecological Landscape is near average in levels of watershed pollution, according to Wisconsin DNR rankings.

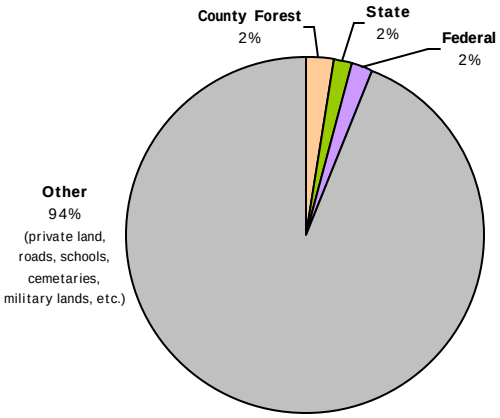

Figure 2-20. Public land ownership in the Forest Transition Ecological Landscape.

Land Use

The Ecological Landscape's total land area is approximately 4.7 million acres, of which 43% is classified as timberland. About 6% of the Ecological Landscape is public land (Figure 2-20), including county, state, and federally managed areas.

Socioeconomics

Socioeconomic data are summarized based on county-level approximations of the Ecological Landscape (referred to as a "region"). Economic data are available only on a political unit basis with counties as the smallest unit. The counties included in this socioeconomic region are Barron, Chippewa, Clark, Langlade, Lincoln, Marathon, Menominee, Polk, Portage, Shawano, Taylor, Washburn, Waupaca, and Wood ("Forest Transition Region").

The counties are quite diverse. Agriculturally, several counties stand out as top producers. Clark and Marathon lead in milk production. Portage leads in potato, pea, and snap bean production. This region has the third highest number of fishery and wildlife areas compared with others in the state. Less timberland is sold or diverted to other uses as compared with the average for other regions in the state.

There is a fairly high per capita water use, mostly for industrial and thermoelectric power generation. Population density of the region is slightly less than half (44 persons/mi^2) than that of the state as a whole (96 persons/mi^2). The population is younger on average, less racially diverse, and less educated compared other regions. It has the second lowest percentage of high school and college graduates. Economically, it ranks near average for all indicators. The manufacturing sector has a relatively more important role, while the percentage of service and government jobs is somewhat below average.

Management Opportunities

- Although this Ecological Landscape is not rich in rare natural communities, there are some significant opportunities to restore and preserve examples of natural community types that are relatively common but often occur in a degraded condition.
- Restoration and management of northern hardwood forests for age classes and structural diversity.
- Reforestation of marginal agricultural lands to reduce forest fragmentation, increase forested habitat, provide protection from erosion, and increase socioeconomic value.
- Preservation of Eastern hemlock on the western extent of its range, where it may have unusual genetic factors.
- Protection of the quartzite outcrop at Rib Mountain, which represents one of only a few such features in the state.
- Sustainable management of the Menominee Forest.
- Non-indigenous invasive plants are a particular problem in this Ecological Landscape due to the interspersion of land uses. They impact natural areas, wildlife forage, and forest regeneration.
- Wetland restoration.
- Preservation of lakes in the Lakewood area.
- Preservation and management of the St. Croix, Wolf, Chippewa, and Black Rivers; all of which run through this Ecological Landscape.
- Prevention of nonpoint pollution in the river systems listed above.
- Management of the Wisconsin River corridor for movement of plant, animal, and aquatic species, which could be increasingly important in an era of climatic change. Consider restoration and dam removals.

Natural Communities

The following table (Table 2-8) lists the natural communities occurring in the Forest Transition arranged by the level of opportunity to sustain and manage the community type in this Ecological Landscape. For further explanation of natural communities and opportunities to sustain them, see Section 3.3.

Table 2-8. Natural communities occurring in the Forest Transition arranged by the level of opportunity to sustain and manage the natural community type in this Ecological Landscape.

Major Opportunity	Important Opportunity	Present
Northern Mesic Forest	Northern Dry-Mesic Forest	Southern Dry-Mesic Forest
Northern Wet-Mesic Forest	Northern Hardwood Swamp	Southern Mesic Forest
Northern Wet Forest	Floodplain Forest	Emergent Aquatic-Wild Rice
	Emergent Aquatic	Southern Sedge Meadow
	Submergent Aquatic	
	Alder Thicket	
	Ephemeral Pond	
	Northern Sedge Meadow	
	Open Bog	
	Shrub Carr	
	Bedrock Glade	
	Dry Cliff	
	Moist Cliff	